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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,049

10/26/2006

Helene Blaise-Graftieaux

BLAISE2

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BROWDY AND NEIMARK, P.L.L.C.  
624 NINTH STREET, NW  
SUITE 300  
WASHINGTON, DC 20001-5303

EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/554,049	<b>Applicant(s)</b> BLAISE-GRAFTIEAUX ET AL.	
	<b>Examiner</b> ELLEN S. WOOD	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 36 and 37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/26/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-35 in the reply filed on 10/22/2008 is acknowledged. The traversal is on the ground(s) that there is no valid basis for the holding of lack of unity of invention. This is not found persuasive because the inner pipe or portion of the pipe coated with a latex substances that has an ionic charge has been discovered to seal a pipe in GB 1322122, thus a pipe coated with a latex substance is not a special inventive entity.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim does not make reference to the claim that is dependent from.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since

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the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 4 recites the broad recitation ***"the latter having a temperature of less than approximately 30°C"***, and the claim also recites ***"preferably of less than or equal to approximately 20°C"*** which is the narrower statement of the range/limitation.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 35 is rejected under 35 U.S.C. 102(b) as being anticipated by Morris et al. (GB 1322122, hereinafter "Morris").

In regards to claim 35, Morris discloses a method of sealing leaks in pipes and other carriers of fluids comprising applying the material to be sealed a natural or synthetic rubber latex or dispersion (col. 1 lines 12-19). The latex is formed on the internal wall of the pipe (col. 2 lines 78-90).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1-14, 19-25, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al. (GB 1322122, hereinafter "Morris") in view of Sanborn et al. (US 5,652,024, hereinafter "Sanborn").

Morris discloses a method of sealing leaks in pipes and other carriers of fluids comprising applying the material to be sealed a natural or synthetic rubber latex or dispersion (col. 1 lines 12-19). The latex is formed on the internal wall of the pipe (col. 2 lines 78-90). The suitable synthetic lattices or dispersions that may be used are polyurethanes, polychloroprenes, styrene/butadiene rubbers, polyacrylonitrile rubbers, acrylic rubbers, etc. (col. 1 lines 20-29). The preferred dispersions and lattices are those which yield non-inflammable films on drying (col. 1 lines 30-36). The total solids content of the latex or dispersion is about 10% to 70%, preferably about 50% to 70%

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(col. 2 lines 66-72). The "flood and drain" technique is the suitable method for forming the latex layer on the internal wall of the pipe (col. 2 lines 73-77). A latex or dispersion which cures at ambient temperatures is pumped into the pipe until it is as full as possible. By means of capillary action and hydrostatic pressure the latex or dispersion penetrates any gaps and inefficient sealing material. If desired, pressure may be applied to the pipe using in order to improve penetration. The excess liquid is then withdrawn from the pipe. The latex or dispersion remaining in the pipe is then allowed to dry to form an elastic tough rubber film (col. 2 lines 78-90).

Morris is silent with regards to the conductivity of the latex. It would be obvious to one of ordinary skill in the art that the film would want to exhibit a low conductivity to avoid electrostatic behavior that could potentially lead to explosions within the pipelines. It is inherent to one of ordinary skill in the art that water is a type of fluid. It would be obvious to one of ordinary skill in the art that the latex would be a food grade, purified, and the reduction of water-soluble constituents for the use of waterlines pertaining to drinking water to prevent any contamination that could be potentially harmful to the consumer.

9. Claims 15-18, 26-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al. (GB 1322122, hereinafter "Morris") in view of Sanborn et al. (US 5,652,024, hereinafter "Sanborn").

Morris discloses the method of forming a latex lining on the internal wall of a pipeline as previously discussed. Morris is silent with the glass transition temperature, the particle size, and the treatment of acid prior to the coating of the latex.

Sanborn discloses applying a latex polymer to a metal substrate to prevent corrosion (col. 1 lines 6-9). The coating composition contains from 5% to 30% by weight of the composition solids of the coating composition (col. 3 lines 19-21). The latex polymer may be copolymerized from at least one comonomer disclosed (col. 3 lines 29-53). The glass transition temperature of the latex polymer is in the range from 10<sup>0</sup>C-16<sup>0</sup>C (col. 4 lines 28-30). The latex polymer has a particle size in the range from 80 to 200 nanometers (col. 5 lines 6-8). The corrosion protection system typically includes a primer coat having a thickness in the range of 25 micrometers to 125 micrometers, a top coat and a mid-coat which are produced from suitable polymers, such as, latex polymers (col. 8 lines 44-58). The coatings are suitable for water pipelines (col. 8 lines 58-62). The coating is heated to a temperature of 60<sup>0</sup>C (col. 10 lines 60-61).

It would be obvious to one of ordinary skill in the art to use the latex polymer of Sanborn as the latex lining of Morris, because the latex polymer of Sanborn would provide a corrosion-resistant coating to the pipes of Morris, which would provide barrier properties and prevent potential harmful residues from contamination of the water in the water pipelines.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 1794